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Claims

- A tissue implant device configured to resist migration in tissue comprising a flexible helical spring having at least one barb that engages surrounding tissue.
 - 2. An implant as defined in claim 1 wherein the at least one barb is proximally facing.
 - 3. The implant as defined in claim 1 wherein the barb faces radially outward from the spring.
 - 4. An implant as defined in claim 1 wherein the barb has a rounded contour.
 - 5. An implant as defined in claim 1 wherein the at least one barb has a sharpened point configured for engaging tissue.
 - 6. An implant as defined in claim 1 wherein the helical spring is formed from a filament having a rectangular cross-sectional profile.
 - 7. An implant device as defined in claim 6 wherein the helical spring comprises a plurality of coils, each having a proximally facing edge along which is formed a plurality of barbs.
 - 8. An implant as defined in claim 1 wherein the spring is formed from a plurality of materials each having different moduli of elasticity.
- 9. An implant as defined in claim 1 wherein the spring is formed from 30 metal.

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- 10. An implant as defined in claim 9 wherein the metallic material is stainless steel.
- 11. An implant as defined in claim 1 wherein the moduli of elasticity of the spring varies along its length.
 - 12. An implant as defined in claim 1 wherein the spring is formed from a filament that has been etched from a flat sheet of material and wound into a spring configuration.
 - 13. An implant as defined in claim 12 wherein at least one barb is formed into the filament during the etching process.
 - 14. A method of forming a tissue implant device comprising:
 forming a ribbon shaped form in a sheet of material by a photochemical etching process;

separating the ribbon formed from the sheet of material; and wrapping the ribbon form into a helical coil shape, plastically deforming the ribbon so that it retains the coil shape.

- 15. The method as defined in claim 14 further comprising:
 forming at least one barb shape on an edge of the ribbon forms so that
 the resultant coiled ribbon has at least one projecting barb along the edge.
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 16. A method as defined in claim 15 wherein at least one barb is formed along an edge that will be proximally facing after the ribbon is wrapped into a coil shape.
- 17. A method as defined in claim 15 wherein a plurality of barb shapes are formed along an edge of the ribbon form so that the resultant coil ribbon has a plurality of projecting barbs along one edge of the coil.

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18. A method of forming a tissue implant device as defined in claim 15 further comprising forming a plurality of ribbons in a single sheet of material by photochemical etching process.